SWAMP Monitoring Strategy
Central Valley Region

During the first five years of SWAMP, the Central Valley Regional Board (Region 5) coordinated with and built off existing frameworks within each individual basin in order to leverage limited resources. Separate approaches were developed based on each basin's unique characteristics, existing monitoring programs, and water quality issues and can be generalized as follows:

- The upper Sacramento River Basin augmented monitoring efforts by locally directed watershed management partnerships, and was primarily focused on the upper Feather River and Pit River watersheds.
- The lower Sacramento River Basin coordinated broad monitoring efforts with the Sacramento River Watershed Program and focused on regional priority issues, including estrogenic endocrine disrupting chemicals and pyrethroid pesticides.
- The San Joaquin River Basin expanded the existing framework used in the multi-agency Grassland Bypass selenium control program, to accommodate more detailed monitoring of each of five sub-basins on a rotational basis.
- The Tulare Lake Basin focused primarily on watersheds with known water quality impairments, with additional efforts to broaden the scope throughout the basin.

Region 5 SWAMP also provided equipment and developed standard operating procedures for staff to perform in-house water sample analyses for total coliform and E. coli bacteria.

Following the statewide SWAMP scientific review in 2005, Region 5 re-evaluated its program. The revised focus aims to better coordinate internal monitoring efforts and data assessments (including supporting the region's 303d/305b Integrated Report development), ensure regional efforts are aligned with the statewide strategy and assessment framework, and facilitate a region-wide program. To meet these objectives a region-wide trend monitoring effort was initiated and builds off of 30-Central Valley sites identified by the statewide contaminants study. The region-wide effort will allow seasonal evaluation at key sites, more detailed evaluation of the Sacramento, San Joaquin and Tulare Lake Basins on a rotational basis, and a consistent framework for coordination efforts.
Coordination is a primary goal of the Region 5 SWAMP and includes, but is not limited to:

- Continued monitoring support for the multi-agency Grassland Bypass Project (GBP);
- Support for development of the Sacramento-San Joaquin Delta Regional Monitoring Program, including staff time, a study of pyrethroid toxicity, and toxicity tools development;
    - A follow-up study is planned in response to pyrethroid toxicity found in the American River below Folsom Lake
- Development of a web-based monitoring directory to improve internal and external coordination;
- Coordinated trend monitoring with DWR in the upper Sacramento River Basin—focused on measuring ambient water quality at lower watershed integrator sites and linked to the statewide SWAMP contaminate trend analysis project;
- Coordinated assessment with several local watershed groups of bacteria concentrations at popular swimming holes throughout the Central Valley during Labor Day weekends in 2007 and 2008.
    - A follow-up study initiated in FY09/10 to identify sources and specific pathogens at sites with high bacteria.

Region 5 also expends considerable resources on data management and supporting Irrigated Lands Regulatory Program and GBP data comparability efforts and entry into a SWAMP comparable database. Detailed information on Region 5 SWAMP--including links to over 35-water quality assessment reports, water quality data for the San Joaquin River Basin, and historic and current program information--is available on the Region 5 SWAMP website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_studies/surface_water_ambient_monitoring/index.shtml